

CLAIMS

What is claimed is:

1. A wine pomace extraction apparatus for the purpose of removing the residue of wine fermentation known as pomace from a fermentation tank, comprising
 - a support cart having a front end and a rear end, a substantially horizontal rectangular frame having slide rails, forward legs of adjustable length as a pair, rear legs of adjustable length as a pair, a docking plate pivotally attached to said front end, wherein in said docking plate has latches for securing to an entry portal of a fermentation tank, and a hydraulic pressure system for providing power and control,
 - a conveyor means having a proximal end, a distal end, and a longitudinal axis suitable for transporting pomace, said conveyor means is entrained by said slide rails on said frame of support cart mounted permitting said conveyor means to move longitudinally with respect to said support cart said conveyor means powered by said hydraulic pressure system, said conveyor means is mounted to support cart so that said distal end protrudes from said forward end of said support cart, and
 - a mechanical sweeper mounted to said conveyor means whereby sweeper guides pomace to the conveyor means when activated, said mechanical sweeper powered by said hydraulic pressure system.
2. The wine pomace extraction apparatus according to Claim 1 wherein said conveyor means is a belt conveyor having a frame supporting a longitudinally positioned conveyor belt having a plurality of cleats secured at intervals to stand perpendicular to said belt, and a hydraulic drive motor suitable to propel said conveyor belt.
3. The wine pomace extraction apparatus according to Claim 1 wherein said mechanical sweeper comprises sweeper wings having arms of length approximate to the radius of said tank, pivotally attached to said conveyor means at locations so as to permit said sweeper wings to move through an arc pivoting near the center of said tank and radially

extending to the perimeter of said tank, said sweeper wings being positioned by hydraulically powered cables, said cables guided by pulleys also attached to the conveyor means whereby said sweeper wings guide pomace to the conveyor means.

4. A method for removing wine pomace from a fermentation tank, said method comprising the steps of:

conveying pomace using a conveyor means from a fermentation tank to a receiver bin outside the tank whereby the pomace is not unduly macerated, and
guiding pomace remaining pomace beyond the collection path of the conveyor means using a mechanical sweeper.